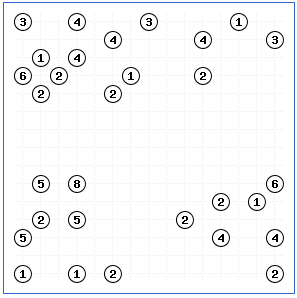
**Problem of the Week #7 Q4**

Due 5/4/12 by 3:15 PM

Turn in to the Math Office POW Cubby or hand in to Matt Mistele

**Bridges Challenge #2**

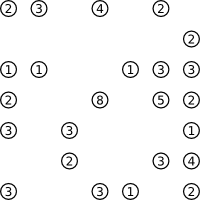
**(Not as difficult as the last one ☺)**



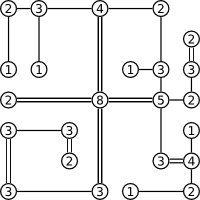
*(Instructions on the back. Happy puzzle-solving! ☺)*

**Bridges Puzzle Rules**

**Hashiwokakero** *(alias Bridges, or Florida Keys Scenic Highways)* is played on a rectangular grid with no standard size, although the grid itself is not usually drawn. Some cells start out with (usually encircled) numbers from 1 to 8 inclusive; these are the *islands*. The rest of the cells are empty.

[](http://en.wikipedia.org/wiki/File:Val42-Bridge1n.png)

A medium-sized puzzle

[](http://en.wikipedia.org/wiki/File:Val42-Bridge1.png)

Solution of above puzzle

The goal is to connect all of the islands by drawing a series of bridges between the islands. The bridges must follow certain criteria:

* They must begin and end at distinct islands, traveling a straight line in between.
* They must not cross any other bridges or islands.
* They may only run [perpendicularly](http://en.wikipedia.org/wiki/Perpendicular).
* At most two bridges connect a pair of islands.
* The number of bridges connected to each island must match the number on that island.
* The bridges must connect the islands into a single connected group.

(Taken from Wikipedia page “Hashiwokakero”)